

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
12 August 2004 (12.08.2004)

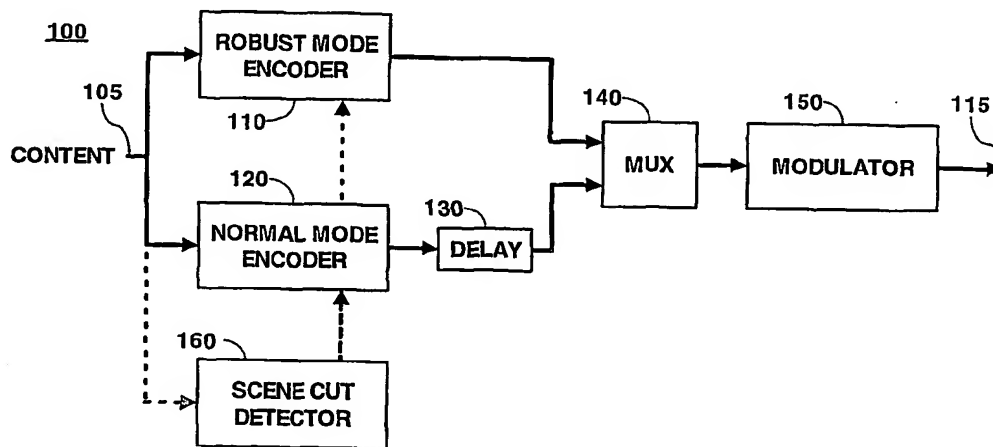
PCT

(10) International Publication Number
WO 2004/068775 A2

- (51) International Patent Classification⁷: **H04L** [US/US]; 11 Toth Lane, Rocky Hill, New Jersey 08553 (US).
- (21) International Application Number: PCT/US2004/002275
- (22) International Filing Date: 27 January 2004 (27.01.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/443,672 28 January 2003 (28.01.2003) US
- (71) Applicant (for all designated States except US): **THOMSON LICENSING S.A.** [FR/FR]; 46, Quai A. Le Gallo, F-92648 Boulogne (FR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BOYCE, Jill** [US/US]; 3 Brandywine Court, Manalapan, NJ 07726 (US). **RAMASWAMY, Kumar** [IN/US]; 71 Sayre Drive, Princeton, New Jersey 08540 (US). **COOPER, Jeffrey**
- (74) Agents: **TRIPOLI, Joseph S.** et al.; c/o Thomson Licensing Inc., 2 Independence Way, Suite 200, Princeton, NJ 08540 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,

[Continued on next page]

(54) Title: **ROBUST MODE STAGGERCASTING USER CONTROLLED SWITCHING MODES**



Transmitter

(57) Abstract: A method and apparatus for staggercasting includes encoding a set of signals representing content. The set of encoded signals is capable of being decoded to produce a corresponding set of decoded signals, each having a quality which is different from the qualities of the decoded signals corresponding to the other encoded signals. A composite signal is generated which includes the set of encoded signals, staggered in time. The set of encoded signals extracting from the composite signal. Errors in the set of extracted encoded signals are detected to produce a subset of available extracted encoded signals which are not erroneous. A content representative signal at a selectable desired quality is then decoded.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*